What is claimed is:

1. A heat treatment system, comprising:
   (a) a plurality of feed lines for feeding a fluid;
   (b) a plurality of treatment zones, each treatment zone being fed by one of the plurality of feed lines;
   (c) wherein each treatment zone includes at least one chamber for holding a material and flowing the fluid through the material;
   (d) a plurality of heating elements, wherein each heating element heats the material in one of the plurality of chambers; and
   (e) a plurality of effluent conduits conducting fluid from the treatment zone, wherein each effluent conduit is equipped with a device selected from the group consisting of a sensing device, a detection device, a sampling device, or a combination thereof.
2. A heat treatment system according to claim 1, wherein there are six treatment zones.
3. A heat treatment system according to claim 1, wherein there are eight chambers for each treatment zone.
4. A heat treatment system according to claim 1, wherein each feed line further comprises a control valve for controlling flow rate of the fluid.
5. A heat treatment system according to claim 1, further comprising a diluent line for each feed line for feeding a diluent fluid to each feed line.
6. A heat treatment system according to claim 5, further comprising a mixing zone for mixing the diluent fluid from the diluent line with the fluid from the feed line.
7. A heat treatment system according to claim 1, further comprising a liquid line for each feed line for feeding a liquid to each feed line.
8. A heat treatment system according to claim 7, further comprising a means for mixing the liquid from the liquid line with the fluid from the feed line.
9. A heat treatment system according to claim 1 further comprising a common effluent line that communicates with all of the effluent conduits to collect all of the fluid from the effluent conduits, said common effluent line located downstream of the device.

10. A heat treatment system according to claim 1, further comprising a heated enclosure for heating the materials in the chambers, wherein the treatment zones are enclosed by the heated enclosure.

11. A method of treating fluid, comprising the steps of:

(a) feeding a fluid to at least one treatment zone, wherein the treatment zone includes a plurality of chambers, each chamber holding a treatment material;

(b) controlling flow rate of the fluid to the treatment zone;

(c) flowing the fluid through the material in each chamber;

(d) heating the material in each of the chambers independently of the other chambers;

(e) flowing the fluid out of the chambers; and

(f) determining a property of each of the fluids flowing out of the chambers.

12. A method according to claim 11, further comprising at least one step of diluting the fluid before feeding the fluid to the treatment zone, of mixing a liquid with the fluid before feeding the fluid to the treatment zone and of vaporizing the liquid before feeding the fluid to the treatment zone.

13. A method according to claim 11, further comprising the step of collecting the fluid flowing out of each chamber into a common line for each treatment zone and collecting the fluid from each treatment zone into a common conduit.

14. A method according to claim 11, further comprising the step of controlling the temperature in each chamber.

15. A method according to claim 11, wherein the feeding step includes feeding a plurality of fluids, further comprising the step of selecting one of the plurality of fluids and feeding the selected fluid to the treatment zone.

16. A method of treating fluid, comprising the steps of:

(a) feeding a fluid to a plurality of treatment zones, wherein each treatment zone includes at least one chamber, each chamber holding a treatment material;

(b) controlling flow rate of the fluid to each treatment zone;

(c) flowing the fluid through the material in each chamber;

(d) heating the material in each of the chambers independently of the other chambers;

(e) individually controlling temperature in each chamber;

(f) flowing the fluid out of the chambers; and

(g) determining a property of each of the fluids flowing out of the chambers.

17. A method according to claim 16, wherein the feeding step includes feeding a plurality of fluids, further comprising the step of selecting one of the plurality of fluids and feeding the selected fluid to the treatment zones.

18. A method according to claim 16, further comprising at least one step of diluting the fluid before feeding the fluid to the treatment zones, of mixing a liquid with the fluid before feeding the fluid to the treatment zones, and of vaporizing the liquid before feeding the fluid to the treatment zones.

19. A method according to claim 16, further comprising the step of collecting the fluid flowing out of each chamber into a common line for each treatment zone and collecting the fluid from each treatment zone into a common conduit.

20. A method of treating material, comprising the steps of:

(a) feeding a fluid to at least one treatment zone, wherein the treatment zone includes a plurality of chambers, each chamber holding a material to be treated;

(b) controlling flow rate of the fluid to the treatment zone;

(c) flowing the fluid through the material in each chamber;

(d) heating the material in each of the chambers independently of the other chambers;

(e) flowing the fluid out of the chambers; and

(f) monitoring each of the fluids flowing out of the chambers.

21. A method of treating material, comprising the steps of:

(a) feeding a fluid to a plurality of treatment zones, wherein each treatment zone includes at least one chamber, each chamber holding a material to be treated;

(b) controlling flow rate of the fluid to each treatment zone;

(c) flowing the fluid through the material in each chamber;

(d) heating the material in each of the chambers independently of the other chambers;

(e) individually controlling temperature in each chamber;

(f) flowing the fluid out of the chambers; and

(g) monitoring each of the fluids flowing out of the chambers.